

Maize drilling stewardship: checklist



Seed treatments are an essential part of crop protection for maize and we need to ensure that we keep them. They are so simple to use that it is all too easy to forget that they are pesticides and that sowing seeds needs the same careful approach as spraying pesticides. This leaflet is designed to remind maize growers and sowing contractors of the main points to consider when sowing the crop*.

- On farm the main risks come from:**
- Accidental seed spills
 - Seed not covered by soil during sowing
 - Dust abraded from seed

When handling seed use appropriate PPE. Take particular care near footpaths and areas of public access. Maize seed poses a special risk because the large seeds are attractive to birds and mammals that often have young and are foraging for food at drilling time.

Avoid dust:

- Treat seed with Bayer-approved application equipment and the support of the Bayer advanced seed treatment technology service. This ensures treatments are applied accurately with uniform loading on each seed and allows use of modern sticker technology to keep the treatment on the seed. It also gives full quality assurance and traceability for complete record keeping
- Ensure drill does not vent to the air (conventional pneumatic vacuum drills must be designed or adapted with an engineering control to discharge drill's airstream into the soil or close to surface of the soil**
- Handle bags with care to avoid abrasion of the treatment from the seed
- Do not tip dust into drill – there should be minimal dust if treatments have been applied correctly
- Do not drill too fast for the conditions

To avoid spills:

Any size of spill is important – deal with it immediately

- Ensure drilling equipment is properly maintained and will not allow seed to leak
- Take time and care when loading seed hopper
- Always fill the drill where any spills can be caught or buried safely (never fill over grass or other vegetation where spills cannot be cleared)
- Ensure no seed is released when seed and equipment is in transit
- Do not allow seed to be spilt during calibration or operating checks

Always carry a spill kit which should comprise:

- Spade to cover or retrieve spilt seed
- Spare bag including label to save seed recovered
- Collection sheet for use when calibrating the drill

Ensure all seed is covered and not exposed for birds and wildlife to eat:

- Treated seed must always be sown using a drill or techniques that place the seed in or on the soil and ensure that it is covered
- Set up and check equipment on a prepared area yet to be sown
- Check seedbed is of appropriate quality for drilling technique being used
- Ensure drill is moving forward before lowering coulters into ground
- Take care when lifting drill in and out of work – ideally shut off seed mechanism a metre before row ends
- When using cereal drills ensure headlands are drilled last, so as to incorporate any spilt seed into the soil

After drilling:

- Before leaving field check for poor seed cover, especially in corners, field headlands and any cobbly areas. If there are large areas of exposed seed the only option is to harrow then roll
- Remove all seed from drill, ensuring seed and dust is collected into labelled bags for safe disposal. Never burn treated seed
- Collect all empty sacks before leaving field
- Never re-use empty bags that have contained treated seed for any purpose other than storing original treated seed
- Store left-over seed in original bags with labels in a secure store for re-use or safe disposal
- Ensure dry, safe storage of seed that prevents access by pets, livestock, birds and small mammals
- Wash hands immediately after use and before eating and drinking
- Make a record of operations, settings and whether any problems encountered

* More details appropriate for maize and for other crops can be found in our guide to safe and effective use of seed treatments which you can obtain at www.bayercropscience.co.uk/safeseed

**For help with drill modification contact drill manufacturer or Bayer CropScience who have extensive experience of drill modifications and can provide advice

